

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
Form PTO-1449 (Modified)  
(Use several sheets if necessary)

**COMPLETE IF KNOWN**

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| Application Number   | 10/727,332       |
| Confirmation Number  | 5294             |
| Filing Date          | December 2, 2003 |
| First Named Inventor | Wei Yen          |
| Group Art Unit       | 2131             |
| Examiner Name        | Not Assigned     |
| Attorney Docket No.  | 57159-8009.US01  |

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**U.S. PATENT DOCUMENTS**

| Examiner Initials* | Cite No. | U.S. Patent or Application |                      | Name of Patentee or Inventor of Cited Document | Date of Publication or Filing Date of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|--------------------|----------|----------------------------|----------------------|--|--|---|
|                    |          | NUMBER                     | Kind Code (if known) |  |  |   |
| J.H.               | A.       | 5,892,900                  |                      | Ginter et al.                                  | 8/30/1996  |   |
| J.H.               | B.       | 6,157,721                  |                      | Shear et al.                                   | 8/12/1996  |   |

**FOREIGN PATENT DOCUMENTS**

| Examiner Initials* | Cite No. | Foreign Patent or Application |        |                      | Name of Patentee or Applicant of Cited Document | Date of Publication or Filing Date of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T |
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|--------------------|----------|---|---|
|                    | 1.*      | Arbaugh, William A., et al., "A Secure and Reliable Bootstrap Architecture," University of Pennsylvania (1996).   |   |
|                    | 2.*      | Aziz, Ashar, et al., "Privacy and Authentication for Wireless Local Area Networks," Sun Microsystems, Inc., (1993).   |   |
|                    | 3.*      | Davida, George I., et al., "Defending Systems Against Viruses through Cryptographic Authentication," IEEE pp. 312-318 (1989).   |   |
| J.H.               | 4.*      | Diffie, Whitfield, "The First Ten Years of Public-Key Cryptography," Proceedings of the IEEE, Vol. 96, No. 5, pp. 560-577 (May, 1988).  |   |
|                    | 5.*      | Diffie, Whitfield, et al., "New Directions in Cryptography," (1976).  |   |
|                    | 6.*      | Dyer, Joan G., et al., "Building the IBM 4758 Secure Coprocessor," Computer, pp. 2-12 (October, 2001).  |   |
|                    | 7.*      | Frantzen, Mike, et al., "StackGhost: Hardware Facilitated Stack Protection," Proceedings of the 10 <sup>th</sup> USENIX Security Symposium (2001).  |   |
|                    | 8.*      | Fujimura, Ko., et al., "Digital-Ticket-Controlled Digital Ticket Circulation," Proceedings of the 8 <sup>th</sup> USENIX Security Symposium (1999).   |   |
|                    | 9.*      | Gligor, Virgil D., "20 Years of Operating Systems Security," University of Maryland   |   |

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| EXAMINER<br><i>J. H. [Signature]</i>   | DATE CONSIDERED<br><i>3/9/06</i> |
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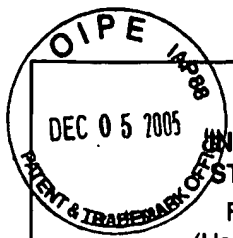
| OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS |          |   |   |
|---|----------|---|---|
| Examiner Initials*                              | Cite No. | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue number(s), publisher, city and/or country where published. | T |
|   | 10.*     | Gutmann, Peter, "The Design of a Cryptographic Security Architecture," Proceedings of the 8 <sup>th</sup> USENIX Security Symposium (1999).   |   |
|   | 11.*     | Itoi, Naomaru, "SC-CFS: Smartcard Secured Cryptographic File System," Proceedings of the 10 <sup>th</sup> USENIX Security Symposium (2001).   |   |
|   | 12.*     | Jaeger, Trent, et al., "Building Systems that Flexibly Control Downloaded Executable Context," Proceedings of the 6 <sup>th</sup> USENIX UNIX Security Symposium (1996).  |   |
|   | 13.*     | Karger, Paul A., "New Methods for Immediate Revocation," IEEE (1989).   |   |
| JH.   | 14.*     | Kent, Stephen Thomas, "Protecting Externally Supplied Software in Small Computers," Massachusetts Institute of Technology (1980).   |   |
|   | 15.*     | Kogan, Noam, et al., "A Practical Revocation Scheme for Broadcast Encryption Using Smart Cards," Proceedings of the 2003 IEEE Symposium on Security and Privacy (2003).   |   |
|   | 16.*     | Lampson, Butler, et al., "Authentication in Distributed Systems" Theory and Practice," Digital Equipment Corporation (1992).  |   |
|   | 17.*     | Lotspiech, Jeffrey, et al., "Broadcast Encryption's Bright Future," Computer, pp. 57-63 (August, 2002).   |   |
|   | 18.*     | Lotspiech, Jeffrey, et al., "Anonymous Trust: Digital Rights Management Using Broadcast Encryption," Proceedings of the IEEE, Vol. 92, No. 6, pp. 898-909 (June, 2004).   |   |
|   | 19.*     | Monrose, et al., "Toward Speech-Generated Cryptographic Keys on Resource Constrained Devices," Proceedings of the 11 <sup>th</sup> USENIX Security Symposium (2002).  |   |
|   | 20.*     | Neumann, P.G., et al., "A Provably Secure Operating System," Stanford Research Institute (1975).  |   |
|   | 21.*     | Palmer, Elaine R., "An Introduction to Citadel – A Secure Crypto Coprocessor for Workstations," IBM Research Division (1992).   |   |
|   | 22.*     | Peterson, David S., et al., "A Flexible Containment Mechanism for Executing Untrusted Code," Proceedings of the 11 <sup>th</sup> USENIX Security Symposium (2002).  |   |
|   | 23.*     | Rubin, Aviel D., "Trusted Distribution of Software Over the Internet," Internet Society 1995 Symposium on Network and Distributed System Security.  |   |

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|   | 24.*     | Smith, Sean W., "Secure Coprocessing Applications and Research Issues," Los Alamos Unclassified Release LA-UR-96-2805 (1996).   |   |
|   | 25.*     | Smith, Sean W., et al., "Building a High-Performance, Programmable Secure Coprocessor," Secure Systems and Smart Cards, IBM T.J. Watson Research Center, NY (1998).   |   |
|   | 26.*     | Smith, Sean W., et al., "Using a High-Performance, Programmable Secure Coprocessor," Proceedings of the Second International Conference on Financial Cryptography.  |   |
|   | 27.*     | Smith, Sean, et al., "Validating a High-Performance, Programmable Secure Coprocessor," Secure Systems and Smart Cards, IBM T.J. Watson Research Center, NY  |   |
|   | 28.*     | Stefik, Mark, "Trusted Systems," Scientific American, pp. 78-81 (March, 1997).  |   |
| J. H.   | 29.*     | Tygar, J.D., et al., "Strongbox: A System for Self-Securing Programs," pp. 163-197  |   |
|   | 30.*     | Tygar, J.D. et al., "Dyad: A System for Using Physically Secure Coprocessors," School of Computer Science, Carnegie Mellon University (1991).   |   |
|   | 31.*     | Van Doorn, Leendert, "A Secure Java™ Virtual Machine," Proceedings of the 9 <sup>th</sup> USENIX Security Symposium (2000).   |   |
|   | 32.*     | White, et al., "ABYSS: An Architecture for Software Protection," IEEE Transactions on Software Engineering, Vol. 16, No. 6, pp. 619-629(1990).  |   |
|   | 33.*     | White, Steve R., et al., "Introduction to the Citadel Architecture: Security in Physically Exposed Environments," IBM Research Division (1991).   |   |
|   | 34.*     | Wobber, Edward, et al., "Authentication in the Taso Operating System," Digital Systems Research Center (1993).  |   |
|   | 35.*     | Yee, B., et al., "Secure Coprocessors in Electronic Commerce Applications," Proceedings of the First USENIX Workshop on Electronic Commerce (1995).   |   |
|   | 36.*     | Yee, B., "Using Secure Coprocessors," PhD Thesis, School of Computer Science, Carnegie Mellon University, Pittsburgh, PA (1994).  |   |

|  |                           |
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|-----------------------|-------------|----------------------------|-------------------------|---|--|---|
|                       |             | NUMBER                     | Kind Code<br>(if known) |   |  |   |
|                       |             | 5,715,403                  |                         | Stefik  | 02/03/98   |   |
|                       |             | 5,905,860                  |                         | Olsen, <i>et al.</i>                              | 05/18/99   |   |
|                       |             | 2002/0184160               | A1                      | Tadayon, <i>et al.</i>                            | 12/05/02   |   |
| JH                    |             | 2003/0144869               | A1                      | Fung, <i>et al.</i>                               | 07/31/03   |   |
|                       |             | 2004/0054923               | A1                      | Seago, <i>et al.</i>                              | 03/18/04   |   |
|                       |             | 2004/0102987               | A1                      | Takahashi, <i>et al.</i>                          | 05/27/04   |   |
|                       |             |                            |                         |   |  |   |
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